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Adsorption h at pumpPatent Number: ☐ EP0770836, A3, B1

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Inventor(s): HASATANI MASANOBU (JP); YAMADA YURI (JP); INAGAKI SHINJI (JP); WATANABE FUJIO (JP); FUKUSHIMA YOSHIKI (JP)

Applicant(s): TOYODA CHUO KENKYUSHO KK (JP)

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Equivalents: DE69606490D, DE69606490T, JP3348336B2, ☐ US5768910Cited Documents: US5335519; US5382558; US5264203; US4637218; US5087597; US4959338; US5160717; DE4340812**Abstract**

An adsorption heat pump includes a working fluid, an adsorption-desorption unit (1), and an evaporation-condensation unit (2,3) connected with the adsorption-desorption unit (1). The adsorption-desorption unit (1) adsorbs and desorbs vapor resulting from the working fluid, and includes an adsorbent being a porous substance. The porous substance has pores, and exhibits a pore diameter distribution curve having a maximum peak falling in a pore diameter range of from 1 to 10 nm. The pores in the diameter range of +/- 40% of pore diameter at the maximum peak have pore volume not less than 60% of a whole volume of the porous substance. The evaporation-condensation unit (2,3) evaporates and condenses the working fluid. The adsorption heat pump can be operated by a low-temperature heat source, and can exhibit a large pumping temperature difference regardless of its small size.

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